

of Transportation

400 Seventh Street, S.W. Washington, D.C. 20590

Pipeline and **Hazardous Materials Safety Administration**

> 9 2006 JUN

Mr. Joe Curtis Vanderbilt Chemical Corporation Murray Division 396 Pella Way Murray, Kentucky 42071

Reference No. 05-0247

Dear Mr. Curtis:

This is in response to your letter and telephone call with a member of my staff concerning how to classify and describe "Zinc, bis(dimethylcarbamodithioato-S,S')" and waste code "K161," which are each listed by the Environmental Protection Agency (EPA) as a hazardous substance under 40 CFR 302.4 but not listed as a hazardous substance under § 172.101, Appendix A, of the U.S. Department of Transportation's Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). I apologize for the delay in responding and any inconvenience this may have caused.

You state your company manufactures zinc, bis(dimethylcarbamodithioato-S,S' in pure form as a Division 6.1 (toxic) PG I material. This material is combined in various proportions with other ingredients to produce other Division 6.1, PG II or PG III, or Class 9 (miscellateous). PG III materials. A "K161" waste is generated from manufacturing these and other materials in the same chemical family. The EPA regulations in 40 CFR 302.4 currently list both zinc. bis(dimethylcarbamodithioato-S,S') and the K161 waste materials as having a reportable quantity of 1 pound (0.454 kg). You state your company's products containing these materials will exceed their EPA reportable quantity when in transit, and ask if you may describe them as follows:

RQ, Toxic, solid, inorganic, n.o.s. (zinc, bis(dimethylcarbamodithioato-S,S')), 6.1, UN 2811, PG I;

RQ, Pesticide, solid, toxic, n.o.s., (zinc, bis(dimethylcarbamodithioato-S,S')), 6.1. UN 2811, PG I; and

RQ, Environmentally hazardous substances, solid, n.o.s., (zinc, bis (dimethylcarbamodithioato-S,S')), 9, UN 3077, PG III.

If the above proper shipping descriptions correspond with the appropriate hazard class and Packing Group of the materials, the descriptions can be used but without the "RO" designation. Section 172.203(c)(2) of the HMR restricts the use of the "RQ" designation to hazardous substances defined in § 171.8 and listed under § 172.101, Appendix A. Solid



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172.101 App. A

materials containing K161 waste that are subject to the EPA's hazardous waste manifest requirement specified in 40 CFR Part 262, do not meet the definition of any other hazard class under the HMR, and are not a hazardous substance or marine pollutant may be described as "Hazardous waste, solid, n.o.s. (K161), 9, NA 3077, PG III," in domestic transportation. In international transportation, K161 waste being offered or intended for transport into or through the United States, must be described as "Waste Environmentally hazardous substances, solid, n.o.s. (K161), 9, UN 3077, PG III. See Special Provision 147 in § 172.102. Additional information about these materials may be entered on the shipping paper provided the information is not inconsistent with the required shipping description. See §§ 172.201(a)(4) and 172.202.

I hope this satisfies your request.

Sincerely,

Hattie L. Mitchell, Chief

Regulatory Review and Reinvention Office of Hazardous Materials Standards 2

05-0247

VANDERBILT CHEMICAL CORPORATION

From-VANBDERBILT CHEMICAL

Murray Division • 396 Pella Way • Murray, Kentucky 42071 Phone – 270-753-4926 • Facsimile – 270-759-9692

June 22, 2005

Via: Certified Mail, Return Receipt Requested

Robert A. McGuire
Associate Administrator for Hazardous Materials Safety
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
400 7th St., S.W.
Washington, DC 20590-0001

Attention: DMH-32

Subject: Request for Clarification & Guidance
Regarding CERCLA Hazardous Substances

Dear Sir:

Vanderbilt Chemical Corporation manufactures chemical products in the United States which are sold globally. Some of these products-are defined as hazardous rnaterials pursuant to Title 49 Parts 171 – 180 (Le., the HMR). In addition, some of these chemicals are, or contain, CERCLA Hazardous Substances pursuant to 40 CFR 302.4. This letter discusses at least one discrepancy between 49 CFR 172.101 Appendix A and 40 CFR 302.4 and requests your regulatory guidance.

The following chemical compound is one such discrepancy:

CASRN – 137-30-4
Technical Name – Zinc, bis(dimethylcarbamodithioato-S,S')CERCLA Synonym – ZIRAM
Commercial synonyms – zinc dimethyldithiocarbamate, methyl zimate
CERCLA RQ – 1 pound (statutory level; original listing c. 1989)

This compound is listed in 40 CFR 302.4 but not in 49 CFR 172.101 Appendix A. In addition, the K161 waste code (which is related to the manufacture of this and other members of the same chemical family) became effective in 1995 but has not, to our knowledge, been listed in Appendix A.

Vanderbilt called the DOT Hotline to discuss these particular regulatory inconsistencies, and although there was some surprise, the DOT Hotline representative stated that only the compounds listed in Appendix A were regulated by the HMR for the purpose of CERCLA. She said, in effect, that neither the presence of this compound in 302.4 nor the discrepancy between Appendix A and 302.4 had any bearing on the task of properly classifying the material or on the use off the "RQ" warning in association with trie proper shipping description.

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This seems inconsistent with the legislative history of CERCLA and the inclusion of transportation in the realm of potential for the release of hazardous substances in the environment. We believe the two lists should be identical.

Significance to Vanderbilt

Vanderbilt manufactures this compound in its pure form; and can custom blend it in various concentrations with other ingredients to suit specific end uses. Based on its inhalation toxicity (LC₅₀) concentration of 0.08 mg/l and its end use. Vanderbilt classifies the pure form as either:

RQ, TOXIC SOLID, ORGANIC, NOS (ZINC, BIS(DIMETHYLCARBAMODITHIOATC)-S,S")-), 6.1, UN2811, PG I (when sold as a non-pesticide)

or

RQ, PESTICIDE, SOLID, TOXIC, NOS (ZINC, BIS(DIMETHYLCARBAMODITHIOATO-S.S')-). 6.1, UN2811, PG I (when sold as a pesticide)

Based on the Hotline representative's interpretation, we should omit the term "RQ" from these proper shipping descriptions.

In addition to offering this compound as a pure commercial chemical, Vanderbilt could blend it with one or more other ingredients in various proportions. It is easy to conceive of a blend or mixture whose LC50 was significantly increased thus lowering the packing group to PG II or PG III. It is even conceivable to raise the LC50 of a blend such that it was no longer classified as a Division 6.1 Toxic. In yet another case, Vanderbilt might add a processing aid to the compound or to one of the blends such that it was no longer respirable. In these cases, the inhalation toxicity issue would be eliminated and the mixture would no longer be a hazardous material pursuant to the HMR. Nevertheless, in each of these scenarios, the resulting product could (and probably would) still contain more than a reportable quantity of a CERCLA hazardous substance in a single package.

For that reason, Vanderbilt believes that a dilute or non-respirable mixture (i.e., one that can not be classified as Division 6.1 - Toxic) should be classified as Class 9 -Miscellaneous based on the CERCLA issue. For example:

RQ. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS (ZINC, BIS(DIMETHYLCARBAMODITHIOATO-S,S')-), 9, UN3077, PG III

Nevertheless, the HMR specifically prevents us from describing, marking and labeling this material as a hazardous material (e.g., 49 CFR 171.2 (f), 172.202 (e), 172.303 (a) and 172,404 (a) - see Exhibit 3). Vanderbilt is in a dilemma over this CERCLA RQ issue. On one hand, we feel a duty to inform transporters that they are handling a RQ of a CERCLA hazardous substance. On the other hand, we are prohibited from violating the HMR.

Vanderbilt requests your guidance to resolve this dilemma. To assist you with that task, we have duplicated some relevant passages of the HMR in the enclosed exhibits. Thank you for considering our situation. We look forward to hearing from you on this vexing issue. You may reach me by e-mail at icurtis@rtvanderbilt.com or telephone at 270-753-4926.

+270 759 9692 T-043 P.004/007 F-980

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Best regards,

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Joe Curtis Environmental Manager

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